

Fossil Energy Environmental Restoration

Funding Profile by Subprogram

(dollars in thousands)

	FY 2004 Comparable Appropriation	FY 2005 Comparable Appropriation	FY 2006 Base	FY 2006 Request	FY 2006 Request vs Base	
					\$ Change	% Change
Fossil Energy Environmental Restoration						
CERCLA Remedial Actions	1,843	1,807	1,807	1,175	-632	-35.0%
RCRA Remedial Actions ...	2,039	2,011	2,011	1,903	-108	-5.4%
Other ES&H Actions.....	5,713	5,649	5,649	4,982	-667	-11.9%
Total, Fossil Energy Environmental Restoration ...	9,595	9,467	9,467	8,060	-1,407	-14.9%

Mission

The objectives of the Fossil Energy (FE) Environmental Restoration activities are to ensure protection of workers, the public, and the environment in performing the FE mission of the National Energy Technology Laboratory (NETL) at the Morgantown (MGN), West Virginia, Pittsburgh (PGH), Pennsylvania, and Tulsa, Oklahoma and Fairbanks, Alaska sites, and the Albany Research Center (ARC) at Albany, Oregon.

Benefits

Environment, Safety and Health activities include those necessary to protect workers and the public from exposure to hazardous conditions and materials (e.g., fires, carcinogens, asbestos, lead, etc.), identify and correct safety and health hazards, improve workplace monitoring and industrial safety programs, achieve compliance with Federal, state and local environment, safety, and health requirements (e.g., permit maintenance), including Department of Energy (DOE) initiatives, and implement initiatives related to achieving best-in-class performance (e.g., ISO-14001). Activities also include environmental protection, and cleanup activities on-site, and at several former off-site research and development locations. Groundwater and soil monitoring/remediation is also required at the NETL and ARC sites to ensure compliance with Federal, state and local requirements.

FY 2006 performance measures are listed below that support the overarching goal of making consistent and measurable progress in reducing and eliminating injuries, incidents and environmental releases.

- Maintain Environment, Safety, and Health (ES&H) risk management programs and Federal, state, and local permit compliance status at NETL and ARC.
- Conduct NETL's remediation activities at Rock Springs and Hoe Creek, WY sites.
- Conduct NETL's and ARC's environmental monitoring and surveillance activities (air, water, wastewater) in support of permit maintenance.

- Conduct ES&H training at NETL and ARC according to job hazard analyses.
- Conduct lead asbestos abatement actions at NETL and ARC as required by maintenance, construction, and projects.
- Conduct very limited on-site infrastructure fixes at NETL and ARC related to resolving ES&H issues (e.g., ventilation).
- Implement continuity of operations program at NETL and ARC.
- Conduct limited pollution prevention and energy efficiency activities in support of ISO-14001 certification maintenance at NETL and ARC.
- Remove hazardous materials at ARC.
- Maintain emergency response and security program capabilities at ARC.
- Continue with ES&H-related equipment/facility upgrades and infrastructure repairs, including facility evaluations at ARC.
- Conduct groundwater monitoring and remediation activities at ARC.
- Reduce sanitary waste from routine operations at ARC.
- Implement limited activities to meet waste minimization and energy efficiency goals.
- Maintain programs for purchasing environmentally preferable products and services.

Detailed Justification

(dollars in thousands)

	FY 2004	FY 2005	FY 2006
CERCLA Remedial Actions.....	1,843	1,807	1,175
▪ Rock Springs Sites	592	583	500
<p>In FY 2006, operate (full scale operation) and maintain the <i>In-Situ</i> Aeration Bioremediation Systems at Rock Springs Sites at Sites 4, 9, and 12 to remove BTEX compounds from Tipton aquifer ground water, as required by the Wyoming Department of Environmental Quality (WDEQ). Conduct periodic ground water sampling events to determine progress in removing contaminants. <i>Participants include: Army Corps of Engineers.</i></p> <p>In FY 2005, operate and maintain the <i>In-Situ</i> Aeration Bioremediation Systems at Rock Spring Sites to remove BTEX compounds from Tipton aquifer ground water, as required by the WDEQ. Conduct periodic ground water sampling events to determine progress in removing contaminants from the Tipton aquifer. <i>Participants include: Army Corps of Engineers.</i></p> <p>In FY 2004, continue second year of full-scale cleanup of Rock Springs sites (~7 year active remediation program, begun in FY 2002). <i>Participants include: Army Corps of Engineers.</i></p>			
▪ Hoe Creek Site	306	302	250
<p>FY 2006, phase into “shut-down” mode at the Hoe Creek Site, which includes conducting limited sparging operations at three locations. Perform periodic ground water surveillance activities to ensure stabilization of background BTEX concentrations. <i>Participants include: Army Corps of Engineers.</i></p> <p>FY 2005, seal and abandon all wells, except long-term monitoring wells to be used in contaminant rebound evaluations, as required by the WDEQ. <i>Participants include: Army Corps of Engineers.</i></p>			

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

In FY 2004, continue third year of full-scale cleanup of Hoe Creek site (~7 year active remediation program, begun in FY 2001). *Participants include: Army Corps of Engineers.*

- **Hannah Site Revegetation.....** **25** **25** **25**

In FY 2006, closeout activities include submittal of bond release document to WDEQ, providing information to general public, and obtaining land owner final approval of reclamation results.

FY 2005, closeout active operations with respect to revegetation initiatives.

In FY 2004, continue Hannah Site revegetation (~10 year program, begun in 1993).

- **NETL Preliminary Site Investigations** **439** **433** **150**

In FY 2006, continue to investigate/support two sites in which NETL may have current and future environmental liability (e.g., typically associated with hazardous waste disposal operations) as determined through EPA and State environmental agency interactions.

In FY 2005, initiate the discovery and investigation of one former FE Research and Development (R&D) site. Conduct preliminary assessments (PA) at two sites (four locations) if necessary to determine environmental risk prior to contract closeout.

In FY 2004 implement three additional off-site investigations and remediations related to project closeouts, based on results of risk analyses.

- **NETL Site Remediation** **30** **20** **0**

In FY 2006, no funding is requested for this activity.

In FY 2005 perform on-site building and soil type remediation assessment at NETL (re-assessment).

In FY 2004 perform on-site building and soil type remediation assessments at NETL (re-assessment).

- **CERCLA PRP Response Activities** **451** **444** **250**

In FY 2006, conduct remedial investigations, feasibility studies, and address environmental claims for two sites found to be contaminated and requiring cleanup under Federal CERCLA and State cleanup standards.

In FY 2005, conduct remedial investigations and feasibility studies on two sites found to be contaminated and requiring cleanup under Federal CERCLA and State cleanup standards.

In FY 2004, implement CERCLA PRP Response Activities.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

RCRA Remedial Actions..... 2,039 2,011 1,903

▪ **NETL On-Site Remediation 1,398 1,379 1,378**

In FY 2006, continue NETL RCRA-related on-site regulatory, corrective, and preventive activities such as: lead and asbestos abatement; waste minimization and pollution prevention activities including managing residual wastes which represent activities beyond baseline programs required to accommodate new/changing DOE requirements and conditions and/or risk reduction and improvement initiatives; performing activities to better achieve and maintain compliant wastewater treatment plant operations (especially at Pittsburgh site) in order to address past notices of violations, and supporting site support contractor RCRA-related risk management and maintenance activities. Also, implement chemical- and pollutant-related environmental management plans under NETL's ISO-14001 program.

In FY 2005, continue NETL on-site regulatory and corrective, activities such as: lead and asbestos abatement; waste minimization and pollution prevention activities including managing residual wastes; achieving/maintaining compliant wastewater treatment plant operations, and site support contractor RCRA-related maintenance activities.

In FY 2004, continue NETL on-site corrective, preventive, and improvement activities such as: lead and asbestos abatement; upgrading chemical handling facilities; waste minimization and pollution prevention activities including managing residual wastes; environmental management plan implementation required for maintenance of ISO 14001 certifications; surface water compliance; and site support contractor RCRA related maintenance activities.

▪ **Albany Research Center RCRA 641 632 525**

In FY 2006, continue ARC RCRA cleanup actions including abating lead and asbestos exposures; resolving chemical storage and labeling; monitoring soil and groundwater; investigation and interim measure actions concerning groundwater, upgrading ventilation and air pollution systems; and improving air emission management, materials handling, and waste disposal activities.

In FY 2005, continue ARC RCRA cleanup actions including abating lead and asbestos exposures; resolving chemical storage and labeling; monitoring soil and groundwater; upgrading ventilation and air pollution systems; and improving air emission management, materials handling, and waste disposal activities.

In FY 2004, continue ARC RCRA cleanup actions including abating lead and asbestos exposures; resolving chemical storage and labeling issues; monitoring soil and groundwater; upgrading ventilation and air pollution control system; implementing environmental management system plan required for ISO 14001 certification; and improving air emission management, materials handling, and waste disposal activities.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

Other ES&H Actions **5,713** **5,649** **4,982**

▪ **Other ES&H Actions at NETL** **4,494** **4,447** **3,776**

In FY 2006, implement baseline regulatory and Integrated Safety Management/ISO 14001 programs (emergency management, occupational medicine and health, industrial hygiene, safety, environmental management, ergonomics, training, and fire protection) at NETL. Implement limited actions in support of achieving DOE's pollution prevention and energy management goals. Implement limited actions in support of correcting ES&H deficiencies associated with infrastructure (e.g., ventilation systems; waste pads; gas cylinder storage areas). Implement non-CERCLA related corrective actions that may occur at off-site locations.

In FY 2005, implement baseline regulatory and Integrated Safety Management/ISO 14001 programs (emergency management, occupational medicine and health, safety, environmental management, ergonomics, training, and fire protection) at NETL. Implement limited actions in support of achieving DOE's pollution prevention and energy management goals.

In FY 2004, maintain regulatory and Integrated Safety Management/ISO 14001 programs (emergency management, occupational medicine and health, safety, environmental management, ergonomics, training, and fire protection) at NETL. Identify safety improvements required to achieve external OSHA-type certifications. Identify and implement safety-related security improvements. Continue to execute environmental objectives and targets under NETL's ISO 14001 programs, including incremental and continued achievement of DOE's pollution prevention and energy leadership goals. Conduct highest priority indoor and CFC-related air quality fixes.

▪ **ES&H Corrective Action at NETL Tulsa Site** **25** **25** **15**

In FY 2006, implement ergonomics corrective actions, provide site-specific ES&H training, conduct emergency drills, and perform infrastructure inspections.

In FY 2005, perform ES&H-related training and an ergonomics review to determine personnel at risk of ergonomic injury. Perform testing of and maintenance on fixed fire protection systems. Conduct emergency management drills.

In FY 2004, continue ES&H program activities at NPTO including inspections, emergency management and drills, training, etc. Expand environmental management system to Tulsa site.

▪ **ES&H Corrective Action at ARC** **1,098** **1,082** **1,111**

In FY 2006, continue ARC safety and health programs and corrective actions including industrial hygiene monitoring and surveillance, occupational medicine, emergency preparedness and drills, ergonomics, training, fire protection, and security improvements. Maintain indoor air quality and ventilation systems, walking/working surfaces, personal protective equipment maintenance, and facility seismic evaluations. Continue incremental progress toward DOE's pollution prevention and energy management goals. Costs also include contracted security, Integrated Safety Management System (ISM) and Environmental Management Systems (EMS) support.

(dollars in thousands)

FY 2004	FY 2005	FY 2006
---------	---------	---------

In FY 2005, continue ARC safety and health programs and corrective actions including monitoring and surveillance, emergency preparedness and drills, and security improvements. Maintain indoor air quality and ventilation systems, walking surfaces, personal protective equipment maintenance, facility seismic evaluations, and training. Continue incremental progress toward DOE's pollution prevention and energy management goals. Costs also include contracted security, ISM, and ISO 14001 support.

In FY 2004, continue ARC safety and health programs and corrective actions including monitoring and surveillance; emergency preparedness and drills; and security improvements. Upgrade indoor air quality and ventilation systems; medical and industrial hygiene services; fire detection and suppression systems; walking surfaces; personal protective equipment maintenance; facility seismic evaluations; and training. Continue to execute revised environmental objectives and targets under ARC's ISO 14001 programs, including incremental and continued achievement of DOE's pollution prevention and energy leadership goals. Costs also include contracted security, ISM, and ISO 14001 support.

▪ Program Support	96	95	80
Fund technical and program management support.			
Total, Fossil Energy Environmental Restoration	9,595	9,467	8,060

Explanation of Funding Changes

FY 2006 vs. FY 2005 (\$000)

CERCLA Remedial Actions

- Action would not be taken on additional, new CERCLA-type sites attributable to NETL's off-site operations or hazardous waste disposal requiring remediation as required under Federal, state, and private sector investigations. Potential sites include: University of Tennessee Space Institute site, and Lake Calumet, Illinois -632

RCRA Remedial Actions

- Decrease in funding will cause reductions in RCRA cleanup actions at ARC including upgrading of material/chemical handling; monitoring of soil and groundwater cleanup and investigation and interim measure actions concerning on-site groundwater contamination -108

FY 2006 vs. FY 2005 (\$000)

Other ES&H Actions

<ul style="list-style-type: none"> ES&H infrastructure-related corrective actions at NETL (e.g., resolving ventilation, mold, egress, and pest control issues) would be deferred. Replacement of smaller chiller units with less than 150 tons cooling capacity containing ozone-depleting substances would not occur. Corrective actions in the safeguards and security area would be reduced or eliminated 	-666
Total Funding Change, Fossil Energy Environmental Restoration.....	-1,406